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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,102	12/31/2001	Takashi Mukaihara	381TO/41670C4	6848
7590	12/30/2003		EXAMINER	
CROWELL & MORING, L.L.P. Intellectual Property Group P.O. Box 14300 Washington, DC 20044-4300			TRAN, BINH Q	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/032,102	MUKAIHARA ET AL.
	Examiner	Art Unit
	BINH Q. TRAN	3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 October 2003.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3, 6, 7 and 17-30 is/are pending in the application.

4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 6, 7 and 17-30 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. 08/233,398.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ..

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Double Patenting***

Claims 6-7, and 17-30 are rejected under the judicially created doctrine of double patenting over claims 1-14 of U. S. Patent No. 5,526,643 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the application claims are merely broader than the patent claims.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

***Claims 17- 28 are rejected under 35 U.S.C. 102 (e) as being anticipated by Kurihara et al.***

***(Kurihara) (Patent Number 5,341,642).***

Regarding claims 17, 20, 23, and 26, Kurihara discloses a diagnostic system (11) for diagnosing a deterioration state of a catalyst in an engine (1), comprising:

a memory (RAM) for storing a preset criterion value and a predetermined range for a state variable of the engine that correlates with a physical quantity affecting a catalytic action of the catalyst; and a processor (11) connected to the memory (RAM) for obtaining an index value indicative of a conversion efficiency of the catalyst (See Figs. 1-4; col. 6, lines 30-67; col. 7, lines 1-25); receiving a value of the state variable of the engine; suspending a determination of the deterioration state of the catalyst if the value of the state variable is outside the predetermined

range; and determining the deterioration state of the catalyst by comparing the index value with the preset criterion value if the value of the state variable is within the predetermined range (See col. 7, lines 25-67; col. 8, lines 1-67; col. 9, lines 1-20).

Regarding claims 18, 21, 24, and 27, Kurihara further discloses that the physical quantity is a temperature of the catalyst (See col. 2, lines 57-64) and the state variable is selected from the group consisting of a quantity of intake air, a quantity of fuel injection, and a revolutions-per-minute of the engine (See col. 1, lines 64-67; col. 2, lines 1-24; col. 5, lines 42-67; col. 6, lines 1-30).

Regarding claims 19, 22, 25, and 28, Kurihara further discloses that the preset criterion value represents a limit of deterioration calling for replacement of the catalyst (See Figs. 4-6; col. 7, lines 25-67; col. 8, lines 1-67; col. 9, lines 1-20).

Regarding claims 29-30, Kurihara further discloses that the steps (d) and (e) are carried out by a processor which obtains the index value and the state variable from a memory which stores a predetermined range for the state variable (See Figs. 4-6; col. 7, lines 25-67; col. 8, lines 1-67; col. 9, lines 1-20).

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of one patents:

Mukaihira et al. (Patent Number 5,526,643) discloses an exhaust gas purification for use with an internal combustion engine.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (703) 305-0245. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



BT  
December 23, 2003

Binh Tran  
Patent Examiner  
Art Unit 3748